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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,638	04/01/2004	Toru Nakao	Q80668	8412
7590 03/08/2006			EXAMINER	
SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3213			OLSON, JASON C	
			ART UNIT	PAPER NUMBER
			2651	
DATE MAILED: 03/08/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/814,638	Applicant(s) NAKAO ET AL.	
	Examiner Jason C. Olson	Art Unit 2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4,6,8,10,13,14,16,18 and 20-24 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4,6,8 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 10,13,14,16,18, and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 06/06/06
- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 6, 8, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip et al. (US 6,970,312) hereafter Yip and Bernard et al. (US 3,869,711), hereafter Bernard.

Regarding claim 2, Yip teaches a DC demagnetizing head (see figure 4, item 10 and 11 and col. 3, ln. 47-49) that slides in contact with a magnetic tape (see figure 4, item 12) that is running, and magnetizes at least a servo band of the magnetic tape the magnetic tape,; a servo write head that is provided at a downstream side of a magnetic tape travel direction of the DC demagnetizing head (see figure 4, items 13, 14, and 15, and col. 3, ln. 47-55; the primary servo head is downstream from the secondary DC head), slides in contact with said magnetic tape that is running (see figure 4, items 112 and 14), and writes a servo signal (see col. 4, ln. 6-14); and the first head and the second head are integrally configured (see figure 4, items 10 and 14; the integrally configured heads are obvious to an artisan in the art because “the use of a one piece construction instead of the structure disclosed in [Yip] would be merely a matter of obvious engineering choice.” See *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965)). Yip fails to teach magnetizing in one direction of longitudinal directions of the magnetic tape

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and magnetizing the magnetic tape in a reverse direction; a guide for regulating a movement in lateral directions of said magnetic tape that is running, said guide is provided between the first head and the second head. However, Bernard is relied upon to teach magnetizing in one direction of longitudinal directions of the magnetic tape (see col. 3, ln. 3-8), magnetizes the magnetic tape in a reverse direction (see col. 3, ln. 13-20); and a guide for regulating a movement in lateral directions of said magnetic tape that is running (see figure 3, item 10; the drum acts as a tape guide), and said guide is provided between a first head and a second head (see figures 1 and 2, items 24, 26, and 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon servo writing of Yip by applying the teaching of magnetizing the tape in one longitudinal direction and in the opposite direction, and a tape guide provided between two heads as taught by Bernard for the purpose of registering a predetermined pattern of magnetic signals on a magnetic medium and reducing the effects of slippage.

Regarding claim 4: claim 4 has limitations similar to those treated in the above rejection, and is met by the combination of Yip and Bernard as discussed above. Claim 4 however also recites the following limitations as taught by the combination: a magnetic tape running system that sends a magnetic tape out of a supply reel (see figure 1, item 18 of Bernard), and winds the magnetic tape with a winder (see figure 1, items 20 and 22 of Bernard), thereby running the magnetic tape (see figures 1 and 2 of Bernard). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon servo writing of Yip by applying the teaching of a magnetic tape running system as taught by Bernard for the purpose as stated in response to claim 2.

Regarding claims 6 and 8, the combination of Yip and Bernard teach all the limitations of claims 2 and 4 above. The combination is further relied upon to teach the guide is comprised of a roller portion and a flange formed in said roller portion (see figure 3, item 10 of Bernard; it can be seen that the roller comprises a flange), wherein said roller portion holds down a surface of said magnetic tape with circumferential surfaces thereof, and wherein said flange holds down side edges of said magnetic tape that is running (see figure 1 and 2 of Bernard). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon servo writing of Yip by applying the teaching of a tape guide as taught by Bernard for the purpose as stated in response to claim 2.

Regarding claims 21 and 22, the combination of Yip and Bernard teaches a support member for connecting the DC demagnetizing head and the servo write head so as to be integrally configured (see figure 4, items 10 and 14; the structure that makes the heads integrally configured is obvious to an artisan in the art because “the use of a one piece construction instead of the structure disclosed in [Yip] would be merely a matter of obvious engineering choice.” See *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965)).

Claim Rejections - 35 USC § 103

Claims 23 and 24 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yip and Bernard as applied to claims 2 and 4 above, and further in view of Chliwnyj et al. (US 5,828,514), hereafter Chliwnyj.

Regarding claims 23 and 24, the combination of Yip and Bernard fails to teach a first guide disposed on one side in lateral directions of the magnetic tape and a second guide disposed

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on the other side in lateral directions of the magnetic tape, and the magnetic tape is held from both lateral sides by first and second guides, however, Chliwnyj is relied upon to teach a first guide disposed on one side in lateral directions of the magnetic tape and a second guide disposed on the other side in lateral directions of the magnetic tape, and the magnetic tape is held from both lateral sides by first and second guides (See figure 4, item 26; the head guide support (403) is disposed in a lateral direction below the magnetic tape (which moves in the B direction) and acts as a guide for the tape just as the guide lip located laterally above the magnetic tape.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon tape guides of the combination by applying the teaching of a tape guide located in the lateral direction above and below the tape as taught by Chliwnyj for the purpose of securing the magnetic tape as it passes the head in the tape drive.

Allowable Subject Matter

Claims 10, 13, 14, 16, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments, see page 8-9, filed 01/05/06, with respect to the rejection(s) of claim(s) 2, 4, 6, and 8 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yip et al. (US 6,970,312), referenced "Yip" and

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Bernard et al. (US 3,869,711), referenced Bernard. The applicant argues that Bernard fails to teach that the first head is a DC demagnetizing head that erases at least a servo band and that the second head is a servo head that writes servo signals. The examiner currently relies upon Yip to teach a DC demagnetizing head that erases at least a servo band and a servo head that writes servo signals. Furthermore, the applicant contends that Bernard fails to teach the DC demagnetizing head and the servo head are integrally configured. The examiner currently relies on Yip and In re Larson to teach that integrally formed construction is considered obvious to an artisan in the art as mere design choice. Claims 2, 4, 6, and 8 currently stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yip and Bernard.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason C. Olson whose telephone number is (571)272-7560. The examiner can normally be reached on Monday thru Thursday 7:30-5:30; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571)272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCO
March 3, 2006



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER